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#159 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Subject: Captan, Dermal Penetration Study

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11/18/82

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Attached is my review of Captan 50-WP: A Dermal Absorption Study in Rats by Joseph S. Ader, Ph.D., July 26, 1982. The study establishes an absorption role of 1.3%/hour of Captan from Captan 50-WP in the rat. This rate can be used as an upper limit for dermal absorption of captan in man since human skin is generally considered up to five times less permeable than rat skin. However, I suggest that we use the rat rate of 1.3%/hour and only consider differences in permeability if it does not provide an adequate margin of safety.

Also, care should be used in the method of utilization of this rate. Thus, if an individual is exposed to 80 grams during an 8-hour working day, we should not use 90 gm x 1.3% x 8 hr for calculating a total absorption. The absorption calculation should be based on an accumulation of 10 gm/hr during the working day.

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